

ABSTRACT OF THE DISCLOSURE

A highly sensitive sensor array can be easily manufactured. An ultrasonic probe as the sensor array used in an ultrasonic diagnostic apparatus includes a substrate formed of a backing member. On a main surface of the substrate, a plurality of piezoelectric oscillators is fixed in a matrix form. Each of the piezoelectric oscillators includes a plurality of laminated piezoelectric layers. Between the piezoelectric layers, inner electrodes are formed. On each end face of the piezoelectric layers, an outer electrode is formed. The piezoelectric oscillators are bonded onto the substrate by adhesive in such a manner that the plurality of piezoelectric layers is laminated in a direction parallel to the main surface of the substrate. On the plurality of piezoelectric oscillators, an acoustic matching layer is formed, and on the acoustic matching layer, an acoustic lens is formed.

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